ENVIRONMENTAL TECHNOLOGY, INC.

2541 East University Drive ● Phoenix AZ 85034 ● 602-267-1900 ● Fax 602-267-1973

October 29, 2014

Ms. Christine Medley
Bio Defense Specialist / PHEP Coordinator
FMIT Office of Emergency Response
500 Merriman Avenue
Needles, California 92363

Re: Third Quarter 2014 Groundwater Monitoring Report
Fort Mojave Smoke Shop
8501 South Highway 95 — EPA Site ID FTMO-005
Mohave Valley, Arizona 86440 — EN TECH Project No. 2789

Dear Ms. Medley:

Enclosed is the ***Third Quarter 2014 Groundwater Monitoring Report*** (Report) for the above referenced facility. Included within is a description of the activities performed by Environmental Technology, Inc. (EN TECH®) on behalf of the Fort Mojave Indian Tribe from July 2014 through September 2014. Those activities included groundwater monitoring, free product checks, and groundwater sampling.

If you have any questions or require additional information with regard to this project, please contact me at your convenience.

Sincerely,

Carney D. Miller, AEP, CIPS
Senior Project Manager

Enclosures

cc: File

ENVIRONMENTAL TECHNOLOGY, INC.

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THIRD QUARTER 2014
GROUNDWATER MONITORING REPORT

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

EPA Site ID FTMO-005

EN TECH Project No. 2789

October 29, 2014

Prepared By: _____
Carney D. Miller, AEP, CIPS
Senior Project Manager

Reviewed By: _____
John P. Kennedy, REM, CSEM
Vice President/General Manager

Reviewed By:

TABLE OF CONTENTS

INTRODUCTION

This Report documents and discusses the activities performed by Environmental Technology, Inc. (EN TECH®) at the Fort Mojave Smoke Shop from July 2014 through September 2014. The Fort Mojave Smoke Shop is located at 8501 South Highway 95, Mohave Valley, Arizona. See Figures 1 and 2 for a Site Vicinity Map and a Site Plan drawing. Field activities performed by EN TECH during the reporting period included the field measurement of groundwater levels, measurement of free product levels, and sampling and laboratory analysis of groundwater from the facility's monitoring wells. The field activities were performed as requested in US EPA Region IX correspondence ***Long-term Release Response and Corrective Action for UST Systems-Groundwater Monitoring Required, Fort Mojave Smoke Shop, Mohave Valley, AZ (EPA Site ID: FTMO-005)***, dated January 14, 2014.

WATER LEVEL MONITORING

EN TECH personnel measured water levels in each of the facility's monitoring wells on July 22, August 13, and September 15, 2014. Water level measurements were made to a surveyed reference point, located at the north side of the top of each well casing, using a product/water interface probe or equivalent device. Water level measurements and calculations of groundwater elevations are summarized in Table 1. Figure 3 presents a hydrograph of groundwater elevations. Figures 4, 5, and 6 contain groundwater contour maps for the July 22, August 13, and September 15, 2014 groundwater elevations.

EVALUATION OF WATER LEVEL DATA

For the reporting period, the maximum groundwater elevation (GWE) of 465.89 feet above mean sea level (amsl) occurred in MW-3 on September 15. The minimum GWE of 465.42 feet amsl occurred in MW-2 on July 22. The maximum average GWE of 465.81 feet amsl occurred on September 15, while the minimum average of 465.48 feet amsl occurred on July 22.

Table 2 is a summary of groundwater gradient calculations for the entire project. As Table 2 indicates, the average groundwater gradient, for this reporting period, ranged from south 30.5°

east at 0.00057 feet per foot on July 22, 2014, to south 89.4° east at 0.00076 feet per foot on September 15, 2014. For all monitoring events, the groundwater flow direction averages south 54.9° east with a maximum variance of 44.8° clockwise of average and 59.6° counterclockwise of average.

EN TECH has collected GWE data on a monthly basis from October 2013 through September 2014. A review of this data reveals that the average groundwater elevation declined approximately 1.13 feet from October 18, 2013 to February 26, 2014. There was a slight rebound in the GWE of 0.20 feet in March 2014. The cause for this increase in GWE is unknown. The GWE began to decline again from April 2014 through June 2014. From July 2014 through September 2014, the GWE elevation increased steadily. This is mostly likely a result of seasonal monsoon rainfall. By September 2014, the average GWE had recovered to within 0.12 foot of the average GWE in October 2013. EN TECH believes the GWE fluctuations seen over the course of this hydro-geologic cycle are most likely typical for the subject site and vicinity.

GROUNDWATER SAMPLING

EN TECH collected compliance groundwater samples from wells MW-1 through MW-7 on September 15, 2014. Prior to sampling, EN TECH personnel measured the depth-to-water and total depth of each monitoring well, calculated the casing volume, and purged three casing volumes using a freshly decontaminated submersible pump and new polyethylene hose. While purging, EN TECH personnel collected samples from the pump discharge to measure and record pH, conductivity, and temperature using a calibrated field grade meter designed for the purpose. The purge water was collected into 55-gallon steel drums and staged on-site for pending disposal. Following purging, samples were collected for laboratory analysis by hand-bailing using a new polypropylene bailer for each well. The contents of the bailer were emptied into laboratory-supplied sample containers. Groundwater samples were labeled and stored in an ice chest containing sufficient ice to reduce and maintain sample temperature at 4 degrees Celsius.

Samples were transported and relinquished to Orange Coast Analytical Laboratory (Orange Coast) using the laboratory-supplied chain-of-custody documentation.

All samples collected from the monitoring wells for laboratory analysis were analyzed by Orange Coast for gasoline-ranged organic (GRO) compounds using EPA Method 8015D and for volatile organic compounds (VOCs) using EPA Method 8260B. Copies of the laboratory reports and chain-of-custody documentation are provided in Appendix A. Field parameter measurements of pH, conductivity, and temperature for the September sample event can be found in Appendix B. A summary of groundwater monitoring data for the entire project can be found in Appendix C. The summary includes water and product level measurements, calculations of groundwater elevation, and analytical results for the chemicals-of-concern.

EVALUATION OF GROUNDWATER SAMPLE DATA

For the September 2014 sampling event, the Orange Coast laboratory report indicates that no GROs or VOCs were detected in the samples collected from MW-2, 3, 4, 6, and 7. This data is consistent with previous laboratory analysis. The reported GRO concentrations in the samples collected from MW-1 and MW-5 were 33,000 micrograms per liter (µg/L) and 170 µg/L, respectively. Benzene, ethylbenzene, and toluene were reported at concentrations of 2,200 µg/L, 1,100 µg/L, and 8,600 µg/L, respectively, in the sample from MW-1. Each of these concentrations exceeds their respective federal Maximum Contaminant Level (MCL). Xylenes were reported at a concentration of 2,000 µg/L, which is below the MCL. Other constituents reported by Orange Coast included n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. None of these constituents have an MCL. No other constituents were reported in the sample from MW-1 although there were elevated detection limits due to sample dilution required for analysis. Benzene was reported at a concentration of 22 µg/L in the sample from MW-5. This exceeds the federal MCL for benzene. Xylenes were reported at a concentration of 90 µg/L, which is below the MCL. 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene were also reported in the sample from MW-5. Neither of these constituents has an MCL. No other constituents were reported above laboratory minimum reporting limits.

The groundwater analytical data from September 15, 2014 is presented in Table 3. The groundwater analytical data from the June 12, 2014 sampling event is presented in Table 4 for comparison. Isoconcentration maps, depicting the reported GRO and benzene concentrations from the September sampling event, are presented in Figures 7 and 8, respectively.

FREE PRODUCT

Free product has been periodically detected in MW-1. Previous free product recovery activities included the use of passive skimmers and hydrophobic absorbent socks. No free product was detected with the interface probe, nor was any free product recovered during this reporting period. Free product has not been detected in MW-1 since December 18, 2013. EN TECH will continue to monitor for the presence of free product and conduct additional free product recovery activities as needed.

ADDITIONAL FIELD ACTIVITIES

In addition to collecting samples from the on-site groundwater monitoring wells, EN TECH also collected a water sample from the potable well located at the Spirit Mountain Casino, approximately 265 feet southwest of the former UST pit location. This sample was collected on September 15, 2014. A sample from this well had previously been collected on October 17, 2013, during the initial site characterization activities. Prior to collecting the water sample, a spigot at the wellhead was turned on and the pump was allowed to run for approximately five (5) minutes. The water sample was then collected directly from the spigot. The potable well water sample, identified as PW-1, was submitted to Orange Coast Analytical for analysis of GRO compounds using EPA Method 8015D and for VOCs using EPA Method 8260B.

The analytical report from the September 15, 2014 sample indicates that no GRO compounds or VOC compounds were detected above laboratory MRLs. This is consistent with the analysis from the October 17, 2013 sample. Based on this information, it is EN TECH's opinion that the potable well at the Spirit Mountain Casino has not been impacted by the release at the subject site.

FUTURE FIELD ACTIVITIES

EN TECH will continue to monitor depth-to-water and check for free product in all on-site groundwater monitoring wells, on a monthly basis. Should free product be detected in any of the wells, free product recovery activities will be conducted to the extent practicable. Groundwater sampling will be conducted on a quarterly basis. The next quarterly groundwater sampling event is scheduled to be conducted in December 2014. The next quarterly groundwater monitoring report is scheduled to be submitted in January 2015.

LIMITATIONS

Environmental Technology, Inc. has performed the tasks outlined in this project report in accordance with generally accepted practices and consistent with the level of work performed by other consultants providing similar services in Arizona at the time of the investigation. No warranty, expressed or implied, is made. This report is not a complete chemical characterization of the property, and is not to be construed in the whole or as part as "due diligence inquiry" as specified in the Superfund Amendment and Reauthorization Act of 1986, (SARA), as amended.

TABLES

Table 1. Water Level Measurement & Calculations

Table 2. Summary of Groundwater Gradient Calculations

Table 3. Summary of Laboratory Analysis of Groundwater Samples – September 15, 2014

Table 4. Summary of Laboratory Analysis of Groundwater Samples – June 12, 2014

FIGURES

Figure 1. Site Vicinity Map

Figure 2. Site Plan

Figure 3. Hydrograph

Figure 4. Groundwater Contour Map – July 22, 2014

Figure 5. Groundwater Contour Map – August 13, 2014

Figure 6. Groundwater Contour Map – September 15, 2014

Figure 7. GRO Isocontour Map – September 15, 2014

Figure 8. Benzene Isocontour Map – September 15, 2014

APPENDIX A. Laboratory Reports & Chain-of-Custody Documentation

APPENDIX B. Field Parameter Measurements

APPENDIX C. Summary of Groundwater Monitoring Data